

*Using Science to Achieve the Best Saddle Fit*



Perfecting the interface between the  
*rider, saddle, and horse*

## **A Perfect Fit Ensures Comfort and Safety for Horse and Rider**

The new Tactilus Equestrics® sensor is a capable alternative to saddle-buying and fitting by trial and error, hit or miss.

A by-product of years of medical product development for wheelchair users, the Equestrics® sensor is the product of extensive scientific research coupled with the latest technology in surface pressure mapping and algorithm development.

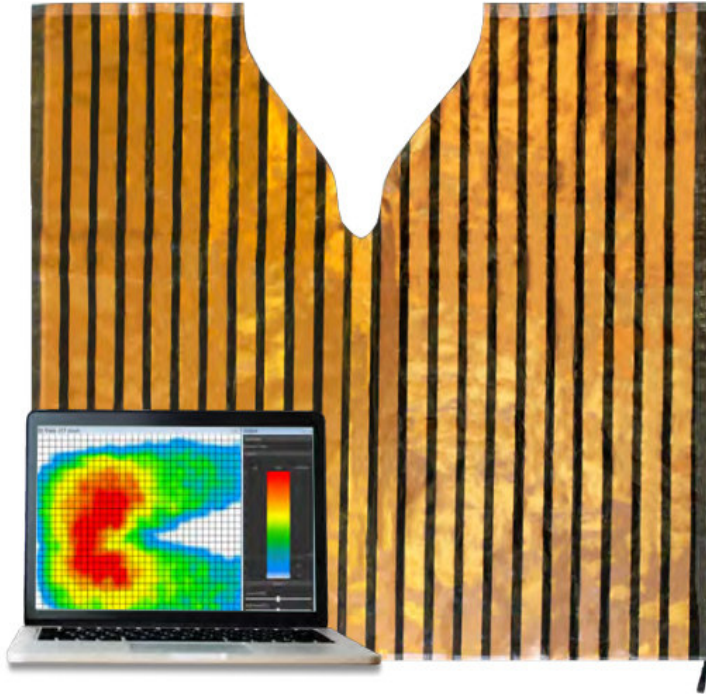
Using the Equestrics® sensor system allows you to quickly evaluate a horse's back for symmetry and potential sore spots, and help determine the most suitable saddle tree type, tree width, panel shape and depth for his back.

## **An Economical, Easy-to-use, and Accurate System**

The benefits of using the Tactilus Equestrics® sensor include:

- Scientifically accurate and precise data for developing the best saddle-fit
- An easy-to-use system that includes everything you need to fit saddles to practically any horse, any rider
- Real-time feedback about pressure points at any location in the contact region
- Cost-effective and reliable system operation
- Wireless capability





Sensor element and electronic components

### Physical Specifications

Technology	Piezoresistive
Pressure Range	0 - 20 PSI (0 - 1.4 kg/cm <sup>2</sup> )
Grid	23 x 21
Number of Sensing Points	483
Active Sensing Area	33 in. x 32 in. (84 cm x 81 cm)
Scan Speed	Up to 100 hertz
Thickness	35 mils (~.875 mm)
Accuracy	± 10%
Wireless Range	30 ft. (9.1 m) range
Battery Life	> 8 hours

*The Tactilus Equestrics® sensor system is the most economical, scientific and user-friendly system for surface pressure mapping available today, both in the lab and in the field.*

### How it Works

The Tactilus Equestrics® sensor is a matrix-based tactile surface sensor that works by the principle of piezoresistance. Tiny sensing cells cover the entire surface area of the sensor "skin" allowing for discrete spot pressure analysis at any point in the contact region. The Tactilus Equestrics® sensor provides real-time data showing precisely where the pressure points occurs between the saddle and the horse.

### About the System

The Tactilus Equestrics® sensor system includes the following components:

- A piezoresistance matrix sensor mat that is placed underneath the saddle on the back of the horse. Tiny sensing cells cover the entire mat and perform discrete pressure analysis of every point in the contact region.
- An electronic controller built into the sensor.
- Rechargeable (USB) battery.

### Our commitment

Customers will not only leave with the assurance of a scientifically validated saddle purchase decision but both the rider and horse stand to benefit by improved comfort and performance.

#### Tiedemann Instruments GmbH & Co. KG

Zur Maximilianshöhe 6  
82467 Garmisch-Partenkirchen  
Germany

Tel.: +49 8821 3068

E-Mail: [info@Tiedemann-Instruments.de](mailto:info@Tiedemann-Instruments.de).

**TIEDEMANN**